DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

Bay Area Branch
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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 1.28

WELDING INSPECTION REPORT

Resident Engineer: Casey, William
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-028773
Date Inspected: 21-Nov-2012

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: American Bridge/Fluor Enterprises, a JV

OSM Arrival Time: 700
OSM Departure Time: 1530
Location: Job site

CWI Name: Jesse Cayabyab

Inspected CWI report:	☐ Yes	☑ No	☐ N/A	**CWI Present:**	☑ Yes	☐ No	
Electrode to specification:	☐ Yes	☐ No	☑ N/A	**Rod Oven in Use:**	☐ Yes	☐ No	☑ N/A
Qualified Welders:	☐ Yes	☐ No	☑ N/A	**Weld Procedures Followed:**	☐ Yes	☐ No	☑ N/A
Approved Drawings:	☐ Yes	☐ No	☑ N/A	**Verified Joint Fit-up:**	☐ Yes	☐ No	☑ N/A
				Approved WPS:	☐ Yes	☐ No	☑ N/A
				Delayed / Cancelled:	☐ Yes	☑ No	☐ N/A

Bridge No: 34-0006
Component: Tower ESW

Summary of Items Observed:

Quality Assurance Inspector (QAI) Rodney Patterson was at the American Bridge/Fluor (ABF) job site at Yerba Buena Island in California between the times noted above in order to monitor Quality Control functions and the in process work being performed by ABF personnel. The following items were observed:

Tower ESW "V"

This QA observed ABF/JV welding personnel performing an exploratory excavation of an Electroslag Weld ESW "V" from face B. The exploratory excavation was performed to determine validity a 6db drop technique for the determination of height, on the linear recordable indications present in the electro slag welds. A total of six indications from the ultrasonic test report were excavated in one single excavation at 1~2mm intervals by the use of a grinder from Y=970~1220 for indications that showed the following ultrasonic response on the ABF QC test report;

Y=1030 AWS db Rating +16, Depth 26mm (from face B), 6db drop height of 6mm.
Y=1050 AWS db Rating +14, Depth 75mm (from face B), 6db drop height of 25mm.
Y=1055 AWS db Rating +19, Depth 23mm (from face B), 6db drop height of 6mm.
Y=1090 AWS db Rating +21, Depth 30mm (from face B), 6db drop height of 11mm.
Y=1100 AWS db Rating +4, Depth 55mm (from face B), 6db drop height of 6mm.
Y=1130 AWS db Rating +10, Depth 24mm (from face B), 6db drop height of 6mm.

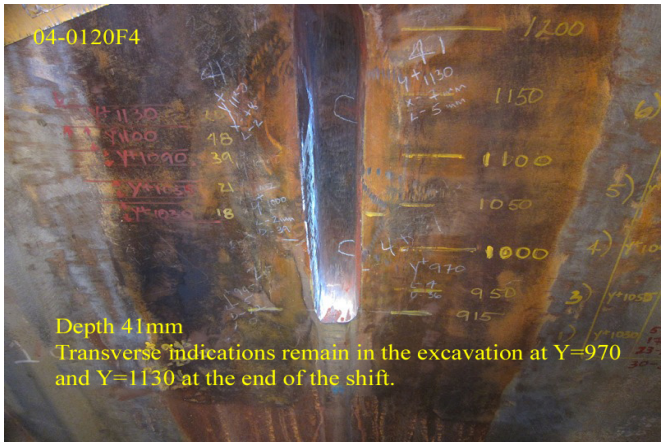
Magnetic Particle Testing was performed by both QC and QA once the grinding was achieved to the sought depth. The starting depth of excavation on this date was a continuation from the previous shift. The results of the exploratory excavations are as follows;

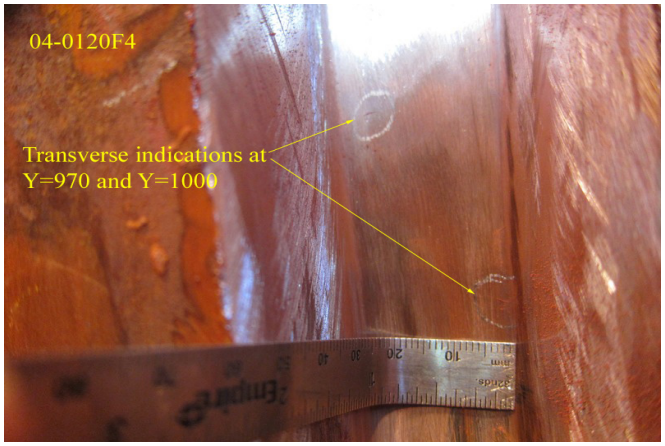
36mm in depth– Transverse indication discovered at Y=970 measuring 6mm in length.
37mm in depth– Transverse indication at Y=970 remains 6mm in length.
38mm in depth– Transverse indication at Y=970 reduces to 3mm in length.
39mm in depth– Transverse indication at Y=970 reduces to 2mm in length. Transverse indication discovered at Y=1000 measuring 2mm in length.
40mm in depth– Unable to detect transverse indication at Y=1000. Indication at Y=970 remains 2mm in length. A total of two transverse indications discovered at Y=1130 measuring 2mm and 5mm in length.
41mm in depth–A total of two indications remain at Y=970 and Y=1130.

The exploratory excavations at this location will be continued on the following shift.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:
Conversations relevant to the work being performed.





Comments

WELDING INSPECTION REPORT

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This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Gary Thomas (916) 764-6027, who represents the Office of Structural Materials for your project.

Inspected By:	Patterson,Rodney	Quality Assurance Inspector
Reviewed By:	Reyes,Danny	QA Reviewer